

Task 6.03c Biweekly Meeting Aug 22, 2017

Presentations

Papers

- 1) Virome 1. Method development and characterization of sewer mined wastewater and large scale collected wastewater. Submitted to JAM by July 2017
- 2) Virome 2. Focus on targeted surrogates in GW and BW (early CY18) (basis of the recent IWA ppt)
- 3) Virome 3: Non-targeted analysis pf GW and combined wastewater (mid CY18)
- 4) GW bacterial microbiome part 2. Three main elements: consistency of microbiome across different buildings, role of time in the new GW system in AWBERC (including sampling of biofilm), and comparison of the human signal alone (bucket showers) (timeline?) Do we want to role some of this into the Jam review?
- 5) Model validation of Norovirus levels (end of summer. EST)
- 6) JAM review on human vs infrastructure microorganisms (end of CY2017)

Products

[6.03C.3] Development and implementation of on-site, non-potable water reuse guidelines, including current state of the science and the stakeholder efforts to implement policy Q4 FY18. Combination of materials from the Blue Ribbon Commission and the papers above

Research Activities

- 1) Model Validation/Development
 - a. Sampling of MBR to define log removal of parasites (181 Fremont not likely to occur until early 2018, will follow up with Arizona prison, and Navajo nation)
- 2) Development of surrogates
 - a. Current sampling at SFPUC (preliminary anaerobic spores evaluation)
 - b. Five phage targets, one plant virus (PMMov) analysis on GW and SFPUC
 - c. Culturable and total bacteria in SFPUC
- 3) Analysis of new alternative waters
 - a. AC condensate (sampling on-going, high total culturable, Myco and Leg results pendings, sequencing at the end of sampling; 4 air handlers sampled 12 times)
 - b. AWG. WaterGen visited Aug. 17-18; need to finalize SOW for CRADA
 - c. Roof runoff (CSU NSF grant funded)
 - d. Stormwater (need to develop modeling framework)

Budget